

## **REMARKS/ARGUMENTS**

### **Introduction**

Receipt of the Final Office Action mailed January 14, 2008 is acknowledged. Claims 1-4, 6-9, 11-13 and 15-18 are pending. Claims 5, 10, 14 and 19 remain canceled. No claims are amended with this response. Thus, no new matter is introduced. Favorable reconsideration in the form of a Notice of Allowance is earnestly solicited.

**I. Rejection of claims 1 - 4, 6 - 12, 15 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Hammer et al. (US 5,501,886) in view of Borodaev et al. (WO 02/078455) with evidence by Hammer et al. (US 4,529,634)**

Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1-4, 6-12, 15 and 17 as being unpatentable over Hammer et al. '886 in view of Borodaev et al. with evidence by Hammer et al. '634.

Applicant again respectfully submits that Hammer et al. '886 do not actually teach a copolymer comprising "unsaturated carboxylic acids" as recited in claim 1. Instead, Hammer et al. '886 only disclose "unsaturated carboxylic acids of the formula IV" (see col. 5, ll. 19-26) which, upon a close evaluation, is actually an *ester* and not an unsaturated carboxylic acid. In support, Applicant invites the Examiner to review the definition R<sup>7</sup> in formula IV which is, among other things, a trialkyl-ammonium radical, but *not* a hydrogen atom which would have resulted in an unsaturated carboxylic acid. This rationale also applies to Hammer et al. '886 column 5, lines 52 - 54 which is an exact repetition of the disclosure provided in lines 19 - 26 of column 5. According to Hammer et al. '886, the radical R<sup>7</sup> is a "trialkyl-substituted ammonium radical" (i.e., not a hydrogen). The R<sup>7</sup> definition must recite hydrogen in order for formula IV to recite an unsaturated carboxylic acid as required in claim 1.

For at least this reason alone, Hammer et al. '886 is not available as a reference under 35 U.S.C. §103(a) because it does not teach or even suggest the limitation of an unsaturated carboxylic acid as recited in claim 1. Thus, Applicant respectfully requests the Examiner withdraw this rejection.

Next, Applicant respectfully contends that a person of ordinary skill in the art thus would not have been motivated to substitute the copolymers of Hammer et al. '886 with the hydrophilic homo- or copolymers of Borodaev et al. to produce a cellulosic casing as recited in claim 1. The teaching of Borodaev et al. is limited to polyamide casings comprising such a copolymer, whereas in the invention of claim 1, the copolymer is in *admixture* with cellulose hydrate. In fact, Borodaev et al. do not contemplate cellulosic casings or casings containing any cellulosic material. Polyamide films and cellulosic films show completely different properties and are intended for different purposes. Therefore, a person of ordinary skill in the art thus would not have been motivated to substitute the copolymers of Hammer et al. '886 with the hydrophilic homo- or copolymers of Borodaev et al. in a cellulosic casing as recited in claim 1.

Finally, the cellulosic casing as disclosed by Hammer et al. '886 is not comparable with the cellulosic casing of Hammer et al. '634 and thus the teachings of these references cannot be combined as relied upon by the Examiner (see page 3, Office Action of September 4, 2007). Hammer et al. '634 discloses a tubular food casing based on cellulose having a coating applied to its outside (col. 3, l. 30). The coating is made up of elastic, non-adhesive copolymers, preferably of copolymers having units of (meth) acrylic acid, (meth) acrylates or vinyl alcohol esters (col. 4, l. 4 - 29). The copolymers are not "in admixture with cellulose hydrate" in the casing as required by claim 1. In the cellulosic casing of Hammer et al. '886, the ester of formula IV is incorporated in the cellulose matrix, and is not coated on the surface in a subsequent step, as in Hammer et al. '634. Thus, the copolymers of Hammer et al. '634 are not identical with the copolymers of Hammer et al. '886 and they were used for different purposes. One of ordinary skill in the art would not, therefore, have considered the teaching of Hammer et al. '634 to be instructive regarding a composition to be incorporated in the cellulose matrix of Hammer et al. '886.

For at least the above reasons, Applicant respectfully submits that claims 1-4, 6-12, 15 and 17 are allowable over the disclosures of Hammer et al. '886, Borodaev et al. and Hammer et al. '634 and, thus, requests that this rejections of these claims be withdrawn.

**II. Rejection of claims 13 and 16 under 35 U.S.C. § 103(a) as being unpatentable over Hammer et al. (US 5,501,886) in view of Borodaev et al. (WO 02/078455) with evidence by Hammer et al. (US 4,529,634) and in view of Crevasse (US 5,215,495)**

Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 13 and 16 as being unpatentable over Hammer et al. '886 in view of Borodaev et al. and Crevasse with evidence by Hammer et al. '634.

Claim 13 depends from claim 1, and recites that the casing is shirred to form a shirred stick. Claim 16 depends from claim 1, and recites a sausage comprising the food casing of claim 1. As stated above, Hammer et al. '886, Borodaev et al. and Hammer et al. '634 do not teach or suggest the food casing of claim 1. Applicant respectfully submits that Crevasse does not fulfill the inadequacies of Hammer et al. '886, Borodaev et al. and Hammer et al. '634.

Crevasse discloses a shirred one-piece casing article formed from a fiber-reinforced cellulose casing (col. 2, l. 48 - 53). The unshirred casing has typically a length of 40 to 60 inches, but no more than about 70 inches, i.e. no more than about 1.78 m (col. 3, l. 51 - 56). The article is additionally surrounded by a sleeve (see Fig. 5). Present claim 13 recites a shirred stick obtained by gathering a cellulosic casing having a length of 5 to 100 m. Thus, in effect, Crevasse teaches away from gathering such long casings as those recited in claim 13. Therefore, any combination of the teachings of Hammer et al. '886 with those of Borodaev et al., Hammer et al. '634 and Crevasse does not amount to a teaching or suggestion of the shirred stick of claim 13.

For at least the above reasons, Applicants contends that claims 13 and 16 are allowable and, thus, requests that the Examiner withdraw this rejection of these claims.

**III. Rejection of claim 1 under 35 U.S.C. § 103(a) as being unpatentable over Hammer et al. (US 5,501,886) in view of Hammer et al. (US 4,529,634)**

Applicant respectfully submits that claim 1 is patentable over Hammer et al. '886 in view of Hammer et al. '634 for the reasons set forth in Section I, namely:

- Hammer et al. '886 fails to teach or suggest the claimed copolymers in admixture with cellulose hydrate as required in claim 1.

- Hammer et al. '886 does not disclose copolymers comprising units of unsaturated carboxylic acids as required in claim 1, but rather copolymers comprising units of esters of unsaturated carboxylic acids.
- Hammer et al. '634 does disclose copolymers comprising units of unsaturated carboxylic acids, but the copolymers do not comprise units of vinylpyrrolidone as required in claim 1.

For each of these reasons, alone, Applicant submits that claim 1 is patentable over Hammer et al. '886 in view of Hammer et al. '634. As such, Applicant respectfully requests that this rejection of claim 1 be withdrawn.

**IV. Rejection of claim 18 under 35 U.S.C. § 103(a) as being unpatentable over Hammer et al. (US 5,501,886) in view of Borodaev et al. (WO 02/078455) with evidence by Hammer et al. (US 4,529,634)**

The food casing according to claim 18 comprises a copolymer comprising units of vinylpyrrolidone and units of at least one comonomer. The copolymer is in admixture with cellulose hydrate. Hammer et al. '886 also discloses a cellulose-based tubular food casing in which a copolymer is admixed with the cellulose. The copolymers of Hammer et al. '886 are very specific since they contain, in addition to the units of vinylpyrrolidone, units having ammonium or amine groups (see Formula II and III in col. 3). The comonomer units are thus different from those found in the copolymers listed in present claim 18. For this reason, alone, Applicant respectfully submits that Hammer et al. '886, alone or in combination, does not teach the limitations of claim 18 and, thus, the rejection should be withdrawn.

Furthermore, Borodaev et al. discloses a tubular food casing comprising a polyamide matrix and a hydrophilic component dispersed therein. The casing is permeable for smoke components and water vapor, but still provides oxygen barrier properties. Casings containing any amount of cellulose as recited in claim 18 are not contemplated by Borodaev et al. Therefore, for at least this reason, the teachings of Hammer et al. '886 cannot be combined with that of Borodaev et al. to produce or render obvious a casing as recited in claim 18. As such, Applicant respectfully requests that the Examiner withdrawn this rejection of claim 18.

**CONCLUSION**

Applicant believes the application is in condition for allowance. Favorable consideration of the application in the form of a Notice of Allowance is therefore respectfully requested. However, any comments or questions concerning the application can be directed to the undersigned at the telephone number given below.

Applicant does not believe any fees are due at this, however, the Commissioner is authorized to charge any deficiency in fees or credit any overpayments to Deposit Account No. 09-0528 (Docket #: P179 1130.1).

Respectfully submitted,

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